Claims

1. A method for accessing and displaying dynamic content in a web page, comprising:

defining a set of Use-Patterns of dynamic content in web pages;

defining a set of Interfaces for accessing data of diverse data sources, wherein individual Interfaces match individual Use-Patterns;

defining methods in the set of Interfaces to access data from the diverse sources of data; and

defining a set of tags for calling the methods.

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- 2. The method of claim 1 wherein a Data Object implementing the set of interfaces comprises one or more data items with values.
- 3. The method of claim 2, wherein the set of Use-Patterns comprises one or more patterns from a group consisting of:

a pattern of accessing and displaying the string value of a data item;

a pattern of iterating through a collection of Data Objects; and

a pattern of determining whether data items in a collection of Data Objects contain a specific value.

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- 4. The method of claim 2 or 3, wherein the set of Interfaces includes:
 - an Interface for accessing the string value of a data item;

an Interface for iterating through and getting the size of a collection of Data Objects; and

an Interface for determining whether the data items in a collection of Data Objects contain a specific value.

- 5. The method of any one of the preceding claims, wherein the set of tags calls the methods in the set of Interfaces to access data of diverse data sources in dynamic content generation.
- 6. The method of any one of the preceding claims, further comprising adapting the set of Interfaces with an Adapter object to access a source of data.

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7. The method of any one of the preceding claims, wherein the set of tags comprises one or more tags from a group consisting of tags that perform the following functions:

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displaying the value of a data item, iterating through a collection of Data Objects, getting the size of a collection;

evaluating tag body based on the result of testing the value of a data item; evaluating the tag body based on the result of testing the size of a collection; or evaluating tag body based on the result of testing the values of a data item in a collection of Data Objects.

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- 8. The method of any one of the preceding claims wherein the set of tags are used with a server having a platform capable of generating a dynamic web page from a mixture of HTML code with the tags.
- 15 9. The method of any one of the preceding claims whereby the need for programming codes for dynamic content generation in a script file of the web page is eliminated.
- 10. A method of accessing content in a plurality of data sources comprising:

 providing a set of tags, each tag capable of invoking at least one method defined in a first set of Interfaces implemented by a first Data Object representing a first data source;

providing an Adapter object which adapts a second set of Interfaces of a second Data Object representing a second data source to the first set of Interfaces; wherein

the Adapter removes mismatches between the second set Interfaces and the tags; whereby

the set of tags is usable to invoke methods defined in the second interface to access data in the second Data Object.

30 11. A method of accessing content in a plurality of data sources as claimed in Claim 10 further comprising:

identifying a set of Use-Patterns;

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wherein the first set of Interfaces defines methods according to the set of Use-Patterns.

- 12. A method of accessing content in a plurality of data sources as claimed in Claim 11, wherein the set of Use-Patterns comprises one or more Use-Patterns from the group consisting of:
 - a pattern of accessing and displaying the string value of a data item;
 - a pattern of iterating through a collection of Data Objects; and
- a pattern of determining whether the data items in a collection of Data Objects contain a specific value.
 - 13. A method of providing a set of tags for accessing data, comprising: identifying ways in which data is accessed;
- providing a set of first programs programmed to access and use data, according to the identified ways in which data is accessed;

providing a set of tags capable of invoking the first programs;

providing a means for adapting second programs to be invocable by the set of tags; whereby

the adapter provides the possibility of the tags invoking second programs not in the set of first programs.

- 14. A method of Claim 13, wherein the ways in which data is accessed includes identifying a data source from which the data is accessed and a connection method thereto.
- 15. A method of claim 13 or 14, whereby proliferation of tags is prevented.
- 16. A method of claim 13, 14 or 15, whereby the set of tags is sufficient for representing all the ways in which a tag user would want to access and use data.
- 17. A method of any one of claims 13 to 16 wherein the set of tags is provided for retrieving and displaying dynamic content in a web page.